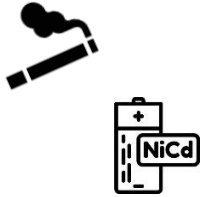


Frequently Asked Questions about Nickel

Nickel is a metal found in soil, water, air, and some foods. It occurs naturally and from human activity.

Where is nickel found?



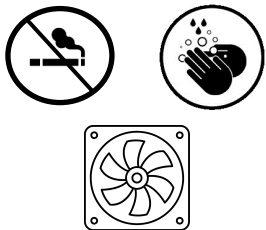
- Smoke from the burning of tobacco, cannabis, wood, fuel oils, and wildfires.
- Some drinking water, most commonly as a result of leaching from metal pipes and fittings.
- Dust and fumes from metal production and processing (nickel smelters, refineries, welding and electroplating).
- Stainless steel, and in some jewelry (including some costume jewelry).
- Some batteries, including nickel-cadmium (NiCd or NiCad) rechargeable batteries, lithium-ion batteries, and batteries used in portable electronic equipment and electric vehicles.
- Some paints and coatings, which may be used on glassware, pottery, and ceramics.
- Some foods and drinks, including nuts, sunflower seeds, legumes (beans, lentils, peas), cereals, chocolate products, and teas.

What are possible health concerns?

Nickel:

- May harm the developing infant and child.
- May harm the male reproductive system.
- May cause skin, eye, nose, and throat irritation.
- Can cause dermatitis in people who are allergic to nickel.
- Can damage the lungs.
- Can cause cancers of the lung, nasal cavity, and nasal sinuses.

What are possible ways to reduce exposure?



- Do not smoke or allow others to smoke in your home, car, or around your child.
- Properly handle and recycle batteries (see links to recycling information below), especially if they are damaged or leaking. Do not let children handle batteries.
- Avoid costume jewelry if you are allergic to nickel.
- If possible, use a high-efficiency filter in your home's central heating and air system.
- Consider buying a portable air cleaner (or "air purifier") that can remove heavy metals, including nickel, from the air in your home. See links to additional resources below.
- If you do any welding or metal working, or work with nickel in other ways:
 - Be sure that your work area is well ventilated, and use proper protective equipment.
 - Follow other safe work practices, including washing hands frequently, keeping work dust out of your home, and washing work clothes separately.
 - Keep children away from welding fumes and other metal vapors and dusts.

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- Because nickel can collect in dust:
 - Wash your and your child's hands often, especially before preparing or eating food.
 - Clean your floors regularly, using a wet mop or high efficiency particulate air (HEPA) vacuum if possible, and use a damp cloth to dust.
 - Include plenty of variety in your and your child's diet. Eat a well-balanced diet with enough iron, which can help reduce the amount of nickel that your body absorbs.
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For more information:

Agency for Toxic Substances and Disease Registry ToxFAQs™ for Nickel: <https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=244&toxid=44>

Recycle Stewardship: <https://calrecycle.ca.gov/epr/batteries/>

Battery recycling location: <https://recyclenation.com/>

HEPA filters: <https://www.epa.gov/indoor-air-quality-iaq/what-hepa-filter>

EPA's Guide to Air Cleaners: https://www.epa.gov/sites/default/files/2018-07/documents/guide_to_air_cleaners_in_the_home_2nd_edition.pdf

Nickel allergy: <https://nickelinstitute.org/en/science/what-do-you-need-to-know-about-nickel-allergy/>